

A GAS SUPPLY SYSTEM FOR A POWDER-FLUIDIZING APPARATUS

Abstract of the Disclosure

A coating apparatus includes a container and a perforated plate separating a plenum from a coating chamber. A gas supply system delivers a gas to the plenum in a sufficient amount for passage of the gas through the plate and suspension of a powder in a fluidized condition in the chamber. The gas supply system preferably includes a primary portion for continuously delivered gas and a controllable pulsing portion for supplementing the gas from the primary portion. In a first mode of operation, the gas from the pulsing portion is cycled to provide variation in the fluidized volume. In a second mode, the pulsing portion delivers relatively long pulses of gas to mix the fluidized powder.